HAER No. UT-41-E

High Mountain Dams in Bonneville Unit,
Island Lake Dam
Wasatch National Forest
3.5 miles west of Trial Lake Campground
Kamas vicinity
Summit County
Utah

HAER UTAH, 22-KAM.V, 1-E-

PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

Historic American Engineering Record Rocky Mountain Regional Office National Park Service U.S. Department of the Interior P.O. Box 25287 Denver, Colorado 80537

HISTORIC AMERICAN ENGINEERING RECORD

HAER UTAH 22-KAM.

High Mountain Dams in Bonneville Unit, Island Lake Dam

HAER No. UT-41-E

Location:

3.5 miles west of Trial Lake Campground, Wasatch National Forest

Kamas vicinity, Summit County, Utah

UTM: 12.498580.4503410

Ouad: Erickson Basin

Date of Construction:

1932

Builder/Designer:

Provo Reservoir Company, Provo, Utah

Present Owner:

Union Reservoir Company, Heber City, Utah 84032

Original Use:

Dam

Present Use:

Dam

Significance:

The Island Lake Dam is one of several lakes in the upper Provo River drainage impounded by the Provo Reservoir Company for irrigation water storage in the 1930s. The small dam has the sloped profile and steel outlet mechanism that characterizes it as representative of earth-fill water retention

structures in the Bonneville Unit of the Central Utah Project.

Inventoried by:

Clayton Fraser and James Jurale

Fraserdesign

Loveland, Colorado

October 17, 1985

High Mountain Dams in Bonneville Unit, Island Lake Dam HAER No. UT-41-E (Page 2)

HISTORICAL INFORMATION

The Provo Reservoir Company of Provo, Utah, received permission from the National Forest Service to impound water for irrigation on Island and Fire lakes in September 1914 and to build dams on the lakes in 1931. Located at the head of the North Fork of the Provo River above Duck and Fire lakes, Island Lake is characterized by shorelines of rocky cliffs, grassy meadows and stands of timber. The lake in its natural state overflowed into a smaller pond, the outlet of which was dammed by the reservoir company in 1932. Island Lake was both lowered below the natural level by a dug ditch and raised by the dam to increase storage capacity and control water flow. The dam typifies small-scale earth-fill construction, with stone riprap placed on the sloped upstream and downstream faces. A 12" Hardesty Model 112 circular headgate regulates the corrugated steel outlet pipe, and a concrete spillway drains the overflow. The dam, outlet and spillway remain in fair condition today. It is proposed to breach the dam and remove the original spillway to lower the water to its natural level.

ARCHITECTURAL INFORMATION

Dam length:

163 feet

Dam height:

8 feet

Dam width:

12 feet

Construct:

Earth fill dam with stone riprap facing

Lake size:

30.4 acres; 460 acre-foot maximum capacity; 2 feet maximum drawdown

Outlet:

Pipe with inclined gate; concrete spillway with freeboard (removed)

BIOGRAPHICAL INFORMATION

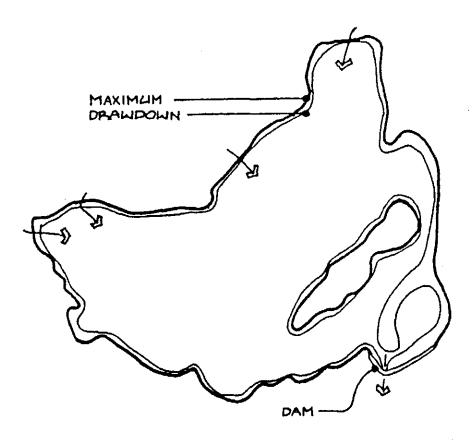
"Preliminary Engineering Report: Stabilization of High Mountain Lakes, Provo River Drainage," National Forest Service Report, 1969, page 24.

Island Lake Reservoir File #16-E, Kamas Ranger Station, Wasatch National Forest, Kamas, Utah

Field inspection by Clayton Fraser and Robert Righter, July 25, 1985.

For additional information, see Irrigation Canals in the Uinta Basin, HAER No. UT-30.

High Mountain Dams in Bonneville Unit, Fire Lake Dam (North Fork No. 5 Lake Dam) HAER No. UT-41-D (Page 3)



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